Water Quality Objectives and Criteria (ug/L)

(revised 5/25/01)

Parameter	RWQCB Basin Plan Objectives	U.S. EPA or California DHS Drinking Water Maximum Contaminant Level		Agricultural Goal [1]	USEPA California Toxics Rule Criteria for Freshwater Aquatic Life for Dissolved Metals (2000)		USEPA National Toxics Rule Criteria for Freshwater Aquatic Life for Total Recoverable Metals (1994)		USEPA National Ambient Water Quality Criteria Freshwater Aquatic Life Protection	
		Primary	Secondary		Dissolved Continuous Concentration (4 day average)	Dissolved Maximum Concentration (1 hour average)	Total Continuous Concentration (4 day average)	Total Maximum Concentration (1 hour average)	Continuous Concentration (4 day average)	Maximum Concentration (1 hour average)
Aluminum		1000	200	5000					87	750
Ammonia		500 [2]							4.15 [3]	24.1 [3, 7]
Arsenic	10 [4]	50		100	150	340	190	360	150 [4]	340 [4]
Boron				700						
Cadmium	0.22 [4]	5		10	2.2 [6]	4.3 [6]	1.1 [6]	3.9 [6]	2.2 [4, 6]	4.3 [4, 6]
Chloride			500,000	106,000						
Chromium		50 [8]		100 [9]	11 [10]	16 [10]	11	16	11 [10]	16 [10]
Conductivity			1,600	700						
Copper	5.6 [4]	1,300	1,000	200	9 [6]	13 [6]	12 [6]	18 [6]	9.0 [4, 6]	13 [4, 6]
Hardness										
Iron	300 [4]		300	5,000						1,000
Lead		15		5,000	2.5 [6]	65 [6]	3.2 [6]	82 [6]	2.5 [4, 6]	65 [4, 6]
Manganese	50 [4]		50	200						
Mercury		2				0.051 [15]	0.012	2.4	0.77 [12]	1.4 [4]
Nickel		100		200	52 [6]	470 [6]	160 [6]	1400 [6]	52 [4, 6]	470 [4, 6]
Nitrate (as N)		10,000								
pH [13]	6.5 - 8.5		6.5 - 8.5							6.5 - 9.0
Selenium		50		20	5 [12]	20 [12]	5	20	5 [12]	[12, 16]
Silver	10 [4]		100			3.4 [6]		4.1		3.4 [4, 6, 17]
Zinc	16 [4]		5,000	2,000	120 [6]	120 [6]	110	120	120 [4, 6]	120 [4, 6]

Footnotes:

1. From Food and Agriculture Organization of the United Nations, 1985. Water Quality for Agriculture
2. Taste and odor threshold
3. pH and temperature dependent; value shown based on ph 7.0 and temperature of 20 C
4. As dissolved
5. Million fibers per liter longer than 10 microns
6. Hardness dependent; value indicated is based on hardness of 100 mg/L as CaCO3
7. Based on pH of 7.0 and temperature of 20 C; maximum allowable concentration if salmonids present
8. Total chromium
9. Chromium (VI)
10. Criteria are for chromium (VI) as dissolved; criteria for chromium (III) as dissolved is hardness dependent
11. umhos/cm
12. As total recoverable
13. Standard pH units
14. Adjusted sodium adsorption ratio
15. For protection of human health from consumption of aquatic organisms
16. Based on selenite and selenate fractions
17. Instantaneous maximum